



Southwest Economy



▶ Texas Facing Historically Tight Labor Markets, Constraining Growth

PLUS

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▶ *If the current pace of growth continues, the Texas economy will add nearly 300,000 jobs in 2019. While this is good news, a number of headwinds impact the outlook.*

Texas employment grew at a rate of 2.3 percent through April, about the same pace as last year and above the state's historical average growth rate of 2.1 percent. If the current pace of growth continues, the Texas economy will add nearly 300,000 jobs in 2019.

While this is good news, a number of headwinds impact the outlook. Our May Texas Business Outlook Surveys of over 350 Texas firms indicate slowing growth and a spike in uncertainty. Business executives express heightened concern regarding trade policy as well as exceptionally tight labor markets.

In "Texas Facing Historically Tight Labor Markets, Constraining Growth," Christopher Slijk notes how low unemployment in many parts of the state is curbing hiring and pressuring wages. The Texas workforce has been growing more slowly in recent years, and migration into the state appears to have slowed since 2015. Smaller Texas metropolitan areas with relatively lower wage rates face some of the greatest difficulties in attracting and retaining workers.

In "Eleventh District Banks Have Performed Well Despite Rising Funding Costs, Nonbank Competition," Kelsey Reichow and Amy Chapel show that our region's banks outperformed national banks in 2018 in terms of higher profitability and fewer nonperforming loans. They also note that slower loan growth and the higher cost of funds remain challenges to the outlook.

In "Texas Industrial Building Booms as Economy, Population Grow," Laila Assanie and Michael Weiss document the industrial building boom that the state has experienced since 2014. They note the increased construction related to e-commerce and the new warehousing needed to locate inventories closer to customers in order to achieve faster shipping times.

Dallas Fed economists will continue to produce research that explores key economic trends in the Eleventh District. This work has critical implications for how we think about economic growth in our region, the U.S. and the global economy.

A handwritten signature in black ink that reads "Robert S. Kaplan". The signature is written in a cursive, flowing style.

Robert S. Kaplan
President and Chief Executive Officer
Federal Reserve Bank of Dallas



Texas Facing Historically Tight Labor Markets, Constraining Growth

By Christopher Slijk

ABSTRACT: Texas labor markets have become very tight in recent years following steady post-Great Recession job growth. Labor force expansion, once fueled by migration, has eased, and businesses report that they cannot find sufficient numbers of workers to expand—particularly for middle-skill positions. This has constrained economic growth and pressured wages higher.

Texas labor markets have become exceptionally tight over the past year. Since the end of the oil bust of 2015–16, many measures of labor market slack have declined to multi-decade lows. This trend has been largely uniform, affecting all of the state’s major regions as jobless rates have reached or surpassed previous record lows.

These trends coincide with similar labor constraints across the U.S.

A tight job market significantly affects the economy. It increases workers’ bargaining power and pushes up wages and benefits. It limits companies’ ability to expand because finding and retaining workers becomes more difficult even as labor costs increase.

When such labor scarcity becomes pervasive across industries, it can constrain economic growth and, over the longer term, may provide stronger incentive for businesses to boost investments in labor-saving technologies.¹

Labor Force Migration, Growth

Since the Great Recession ended a decade ago, the Texas job market has experienced a robust recovery. Texas’ employment expansion preceded U.S. job growth, and by 2012, the state had exceeded its prerecession employment peak. Texas job growth from 2010 to 2018 outpaced its long-term trend of 2.1 percent on average. Over this time, Texas became the fourth-fastest-growing state, trailing only Nevada, Florida and Colorado, despite an oil bust in 2015–16.

Meanwhile, data available covering 2010–17 show the working-age population (ages 16 to 64) grew just 1.5 percent per year. Migrants to the state augmented this growth. Domestic

and international migration have accounted for nearly half of overall Texas population growth since 2010 and an even larger share of the growth of the working-age population, reflecting that many move to Texas for employment.²

Recent data suggest that these movements have slowed; since 2016, the share of population increase attributable to domestic migration has nearly halved, dropping average annual growth to just 1.3 percent over the past two years (*Chart 1*). Some of this deceleration is likely due to the U.S. economic expansion in recent years—as employment prospects improved and unemployment rates declined broadly across the nation, the need for job seekers to incur the costs of moving to Texas for work diminished.

The change in migration patterns has been most striking in Houston as the area flipped from being a top region for domestic migration in 2010–16 to experiencing a net outflow the following two years.

Data from the Texas Demographic Center suggest that through 2030, the majority of overall population growth in the state and its major metros will come from a combination of domestic and international migration.

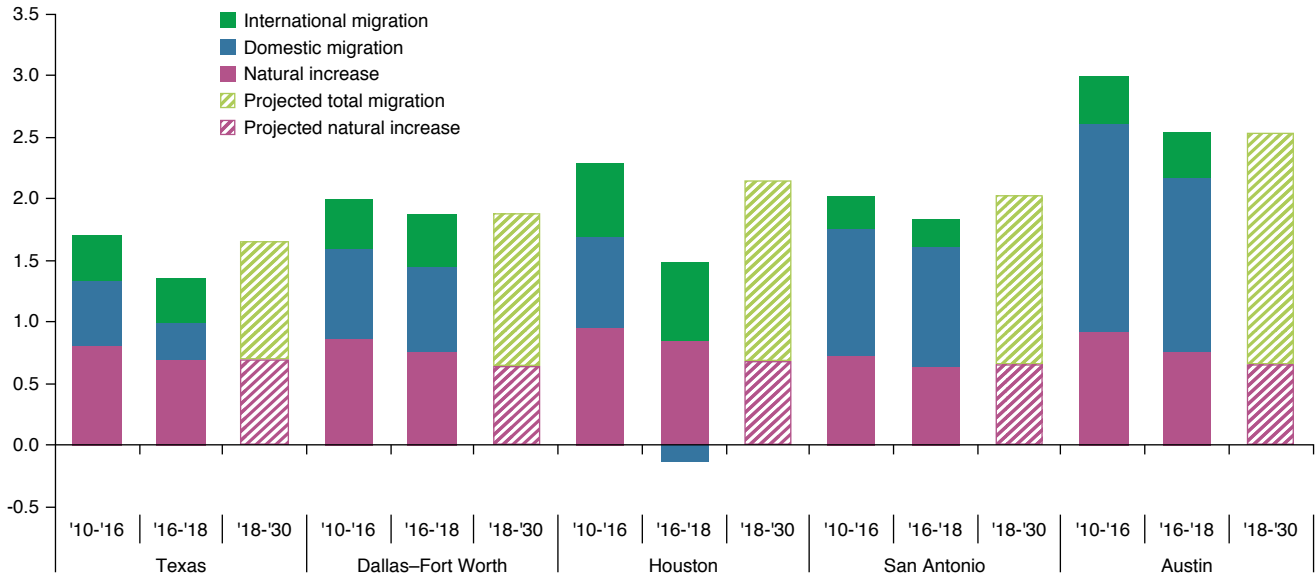
Natural increase—the number of births relative to deaths—is expected to continue declining as a driver of population growth in Texas and the rest of the U.S.

This change is even starker among the working-age population—more than three-fourths of the 1.4 percent annual growth expected through 2030 is projected to come from net domestic and international migration. This will constitute a majority of labor force growth over the period.

CHART
1

Despite Slowing in 2016–18, Migration Expected to Fuel Future Texas Growth

Annualized population growth (percent)



NOTES: Projected natural increase data are based on state population projections produced in 2014. All other data are based on projections produced in 2018.
SOURCES: Census Bureau; Texas Demographics Center.

Record Low Unemployment

With the number of workers failing to keep up with the rapid increase in employment, labor availability has tightened in Texas. The state unemployment rate, after peaking at 8.3 percent in late 2009, has steadily declined. The rate stood at 3.7 percent in April 2019, its lowest level since records began in the mid-1970s. Texas’ unemployment rate of 4 percent or below for over a year suggests unprecedented labor market tightness.

Broader measures of labor market slack further illustrate the unusual level of constraint. The U.S. Bureau of Labor Statistics’ broader U-6 measure of state unemployment—which includes discouraged workers (who have given up looking for work in the last 12 months) and those who are working part-time but would like to work full-time—reached a record low of 7.2 percent in early 2019. This is significantly below the 25-year average of 9.9 percent and well below the recessionary peak of over 15 percent.

Looking more closely at regions within the state, a similar picture emerges.

Jobless rates remain significantly below their long-term averages and are less than half of their Great Recession peaks (Chart 2). Among urban areas, only the Texas border region has a higher jobless rate than the U.S. and Texas.

Regional Areas of Strength

West Texas, which includes the energy-intense Permian Basin and Midland-Odessa, has the lowest unemployment rate in the state, 2.4 percent, and is one of the tightest labor markets in the nation. “Man camps” have sprung up around Midland-Odessa; housing shortages abound as workers rush into the region to fill lucrative jobs in the oil and gas industry.

Along the Interstate 35 corridor’s populous metropolitan areas, labor markets are constrained, though slightly above their all-time unemployment lows. The four largest metros—Dallas, Fort Worth, Austin and San Antonio—nationally rank in the top 25 of large metro areas (population of over 1 million) for lowest rates of joblessness.

Nevertheless, they continue experiencing strong labor force growth, with

the North Texas region growing well above average at 2.3 percent, and the Central/South Texas labor force expanding at close to the state average of 1.5 percent year over year through April.

These regions benefit the most from migration to the state. The population age 25 to 64 is expected to grow about 2 percent annually through 2030 based on recent population trends—and most of that growth (1.9 percentage points) is projected to be from a mix of domestic and international in-migration.

The Gulf Coast region—dominated by metropolitan Houston—has record low unemployment after joblessness rose in the oil bust years of 2015–16. A net outmigration of people followed the slump, possibly exacerbated by Hurricane Harvey in August 2017. These departures, combined with the energy sector rebound in 2017–18, led to an unprecedented tightening of regional labor markets.

The Texas–Mexico border stands out as the one region with a significantly higher unemployment rate than the state average. Still, the 4.4 percent jobless rate in April was a record

low for the region. Its young, predominantly Hispanic population has historically grown faster than the state and national averages.

However, recent slowing in the pace of labor expansion—down to just 0.4 percent year over year—has pushed the jobless rate to less than half of its long-term average. Proximity to high-paying oilfield jobs in the Eagle Ford and Permian Basin shale plays, along with declining appeal as a final destination for Mexican immigration, may factor into this slowing. The region overall has experienced net outmigration since 2013.

Struggling to Hire

Recruiting and retaining hires has become increasingly difficult for Texas businesses. Starting in late 2017, a majority of surveyed firms have had difficulties finding qualified applicants to fill open positions, the Federal Reserve Bank of Dallas' Texas Business Outlook Surveys (TBOS) show.

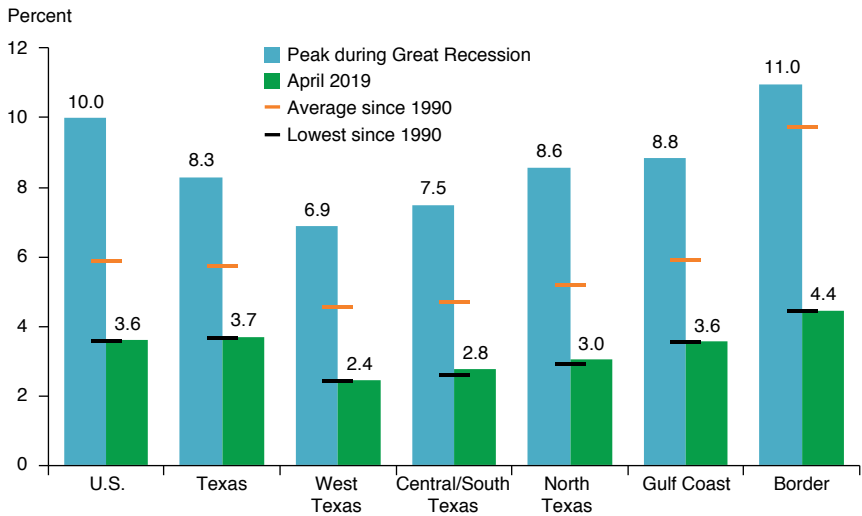
Comments from businesses have persistently pointed to the lack of workers impeding company expansion and slowing hiring.

“We simply cannot find enough legal entry-level workers to complete our work. We are actively turning away new business. Despite all efforts including pay increases, hiring and referral bonuses, etc., we are unable to keep a full staff,” a survey respondent in professional and business services noted in April. “We will ultimately lose close to \$2 million in revenue this year due to lack of available labor.”

Other survey contacts have mentioned similar constraints, with one financial services firm saying that the “lack of a qualified workforce is our leading contributor to stalled growth.”

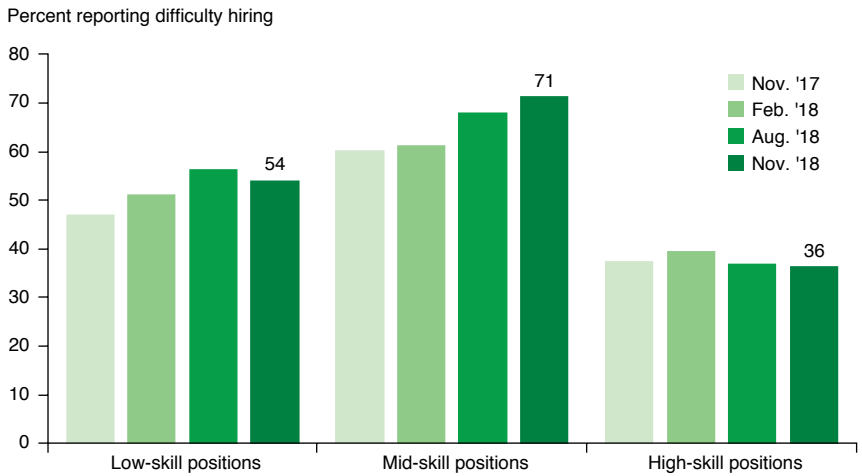
While labor tightness is broad based, it has been particularly acute for firms seeking to fill mid-skill positions—those requiring some college or technical training (*Chart 3*). The positions include many blue-collar trades, which respondents have identified as constrained nationally for the past several years.³ TBOS surveys have noted increasing difficulty finding

CHART 2 Unemployment Rates Very Low Across All Texas Regions



NOTES: West Texas includes the Midland, Odessa, Abilene, Amarillo, Lubbock and San Angelo metropolitan statistical areas (MSAs). Central/South Texas includes the Austin–Round Rock, San Antonio–New Braunfels, College Station–Bryan, Killeen–Temple and Waco MSAs. North Texas includes the Dallas, Fort Worth, Sherman and Wichita Falls MSAs. Gulf Coast includes the Houston–The Woodlands–Sugarland, Beaumont–Port Arthur, Victoria and Corpus Christi MSAs. Border includes the El Paso, Laredo, McAllen–Edinburg–Mission, and Brownsville–Harlingen MSAs. SOURCES: Bureau of Labor Statistics; Texas Workforce Commission; adjustments by the Federal Reserve Bank of Dallas.

CHART 3 Business Surveys Suggest Large Mid-Skill Worker Shortages



NOTE: The question was only posed to firms that noted problems finding qualified workers when hiring. SOURCE: Federal Reserve Bank of Dallas, Texas Business Outlook Surveys.

mid-skill workers, with nearly three-quarters of hiring firms saying they struggled to recruit for such positions in November 2018.

Texas Employer Impact

Responding to this persistent inability to find workers, businesses have looked to a number of alternative

strategies to attract labor. Intensified recruiting—the predominant method until mid-2018—included more advertising, greater utilization of employment agencies and sign-on bonuses.

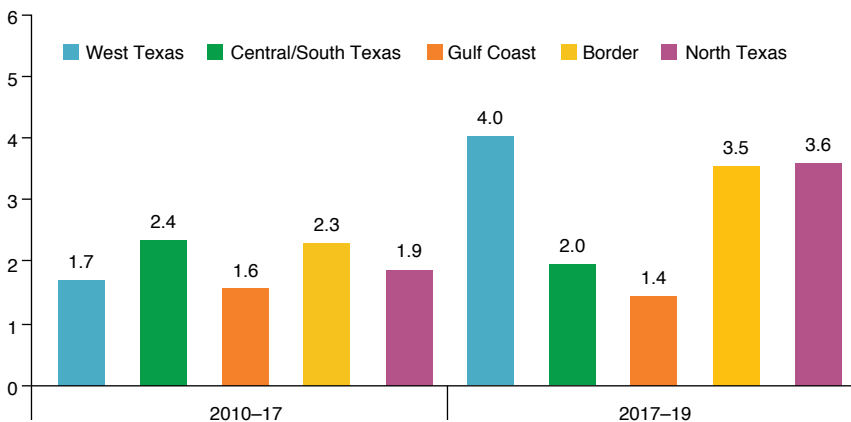
More recently, employers have turned to increasing wages and benefits as the primary means of dealing with the labor shortage. The share of

**CHART
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Rate of Pay Raises Broadly Accelerates Across Areas

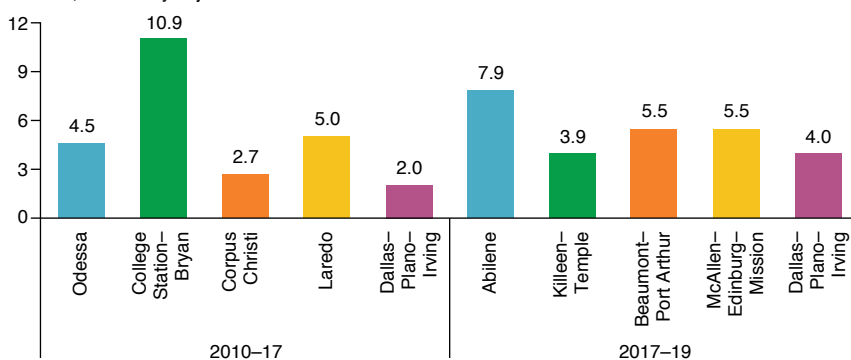
A. Wage Growth by Texas Region

Percent, seasonally adjusted annualized rate



B. Top Wage-Growth Metros by Texas Region

Percent, seasonally adjusted annualized rate



NOTES: All wage data are six-month moving averages. 2017-19 data are annualized through April 2019. The colors of the bars correspond to the region in the state.

SOURCE: Bureau of Labor Statistics, Current Employment Statistics.

TBOS respondents reporting that they had resorted to such increases has risen sharply, from about 50 percent in early 2018 to 67 percent by year-end.⁴ As one contact in the hospitality industry noted in March 2019, “Hiring remains a huge problem, so we anticipate increases in wages and benefits just to compete.”

Wage growth by region has varied due to, among other factors, industry compositional differences and the lagged effects of labor constraints. However, most regions of the state have reported significant acceleration of average hourly wages since 2017 (Chart 4). In Texas and the U.S., wage growth from 2010 to 2017 was 2.0 per-

cent and 2.1 percent, respectively, but has since accelerated.

Within the state, some metros experienced particularly large increases. While wage growth was highest mostly in areas tied to energy from 2010 to 2017, it has since been strongest in mostly smaller metro areas with very low unemployment and weak labor force growth.

Wages in Abilene, which has a record-low 2.8 percent unemployment rate, rose by nearly 8 percent annually from 2017 through April 2019. Similarly, wage growth in McAllen-Edinburg-Mission, which has a record-low 5.4 percent unemployment rate, reached 5.5 percent over the period.

Across all industries, businesses are having difficulty finding any workers, skilled or unskilled, to expand. Wage growth may at some point encourage workers on the sidelines to reenter the workforce. Additional migration into Texas, whether domestic or international, could also alleviate worker shortages.

However, federal curbs on international migration and an improved national economy limit Texas’ ability to attract new workers.

Until the issue of shortages in Texas is resolved, it is likely that businesses will struggle trying to hire employees or replace workers lost in the course of normal turnover.

Job growth in the state over the past two years has held above the long-term average of 2 percent, and current estimates of 2019 growth suggest that this will continue, potentially sending the state unemployment rate even lower by year-end.

Christopher Slijk is an assistant economist in the Research Department at the Federal Reserve Bank of Dallas.

Notes

¹ “New Technology Boosts Texas Firms’ Output, Alters Worker Mix,” by Emily Kerr, Pia Orrenius and Christopher Slijk, Federal Reserve Bank of Dallas *Southwest Economy*, Third Quarter, 2018, www.dallasfed.org/~media/documents/research/swe/2018/swe1803b.pdf.

² “Gone to Texas: Migration Vital to Growth in the Lone Star State,” by Pia Orrenius, Stephanie Gullo and Alexander T. Abraham, Federal Reserve Bank of Dallas *Southwest Economy*, First Quarter, 2018, www.dallasfed.org/~media/documents/research/swe/2018/swe1801b.pdf.

³ “Why Are Labor Markets for Blue-Collar Workers Tighter than for White-Collar Ones?” by Gad Levanon and Frank Steemers, Conference Board, Oct. 16, 2018, www.conference-board.org/blog/postdetail.cfm?post=6894.

⁴ See the Texas Business Outlook Surveys special questions, Nov. 26, 2018, www.dallasfed.org/research/surveys/tbos/2018/1811q.aspx.

Texas Industrial Building Booms as Economy, Population Grow

By Laila Assanie and Michael Weiss

ABSTRACT: A significant portion of Texas' recent construction activity has been industrial building, with Dallas–Fort Worth leading the nation and Houston among the top six markets. Burgeoning e-commerce, state population gains and an expanding export market have contributed to the growth spurt that has included increases in transportation and logistics employment.

The boom in Texas commercial real estate activity is plainly visible in the high-rises that create the skylines of the state's major metropolitan areas and in the sprawling office campuses dotting its thoroughfares. Another source of major activity is far less conspicuous, though it has powered another new wave of commercial construction and economic activity.

Demand for Texas industrial space, which includes warehouses, manufacturing plants and research and development facilities, has been robust during the ongoing expansion cycle.

Well over 235 million square feet of space was built and absorbed from 2010 to 2018 statewide, with Dallas–Fort Worth ranking No. 1 in the country in construction and in net absorption (net change in square footage of occupied space) during the period and Houston placing among the top six.^{1,2}

Texas' underlying economic expansion has been solid for the most part since the end of the Great Recession,

supporting healthy and broad-based gains in the commercial real estate sector—apartments, offices and industrial space. It was only during the most recent energy bust, in 2015–16, that employment growth in the state fell below its long-term average growth rate, primarily due to Houston's decline.

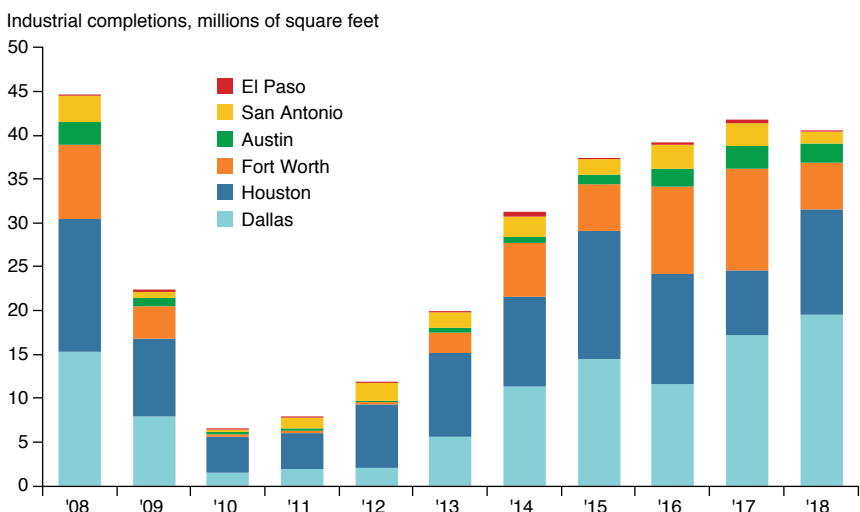
Commercial construction and real estate activity play a notable role in an area's economic growth, buoying output and employment growth. The state's commercial real estate sector will likely continue to expand this year, albeit at a slower pace.

Industrial Construction Gains

Consistent with Texas' "bigger is better" ethos, the thriving construction sector recorded \$104.1 billion worth of total contract values (residential, nonresidential and nonbuilding) last year—an inflation-adjusted increase of 5.9 percent from 2017. The 2018 total was just shy of the previous peak in 2015, when \$104.5 billion of new

CHART
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DFW and Houston Major Players in the State's Industrial Market



SOURCE: CBRE Econometric Advisors.

projects broke ground.³ Last year's increase was driven by a pickup in residential (single-family and multifamily) and nonbuilding (roads, bridges, power plants, etc.) construction.

Texas has undergone a period of vast real estate development since 2010, partly because so many people have been drawn to the area. The state's population reached 28.7 million in 2018, adding 3.5 million residents since 2010—placing it No.1 among U.S. states in numeric increase. Texas' building boom has boosted construction employment, which rose 3.9 percent in 2018.

Industrial construction has expanded rapidly since 2010, making Texas the top-ranking state in the country in terms of square footage.⁴ From 2010 to 2018, industrial space built in Texas' major metros was four times the square footage of new office space.

Most industrial building occurs within major metropolitan areas. Since 2014, Texas' five major metropolitan areas annually added more than 30 million square feet of industrial property—principally warehouses—with the total exceeding 40 million square feet in both 2017 and 2018 (*Chart 1*). By comparison, the largest amount added in any previous year (dating back to the late 1980s) was 45 million square feet in 2008, most of it greenlighted just before the Great Recession that began in December 2007.

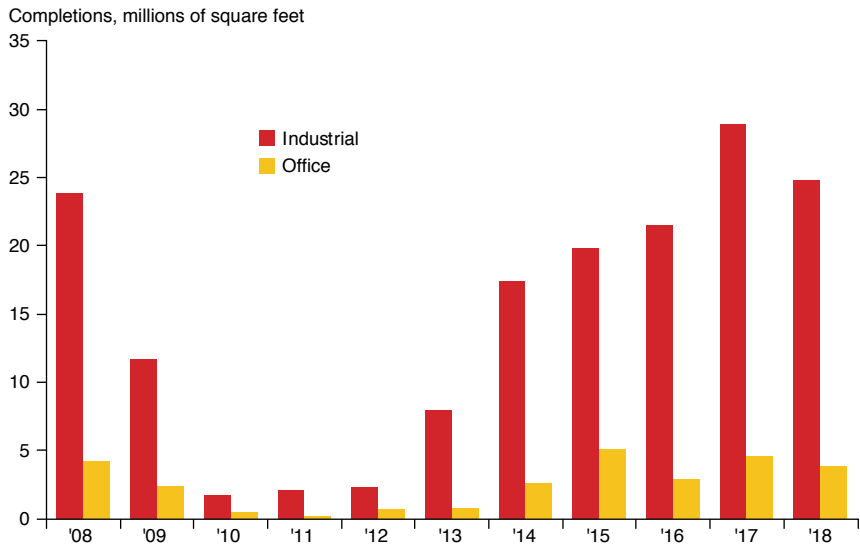
The expansion has been most visible in DFW and Houston, where occupancy rates for warehouse space have hovered around 90 percent since 2013.

After a period of such rapid expansion, growth in industrial construction statewide is ebbing, albeit remaining elevated by historical averages. Inflation-adjusted construction contract values for warehouses dipped 3.8 percent in 2018 relative to 2017 and in the first four months of 2019 fell 13.2 percent compared with the same period in 2018.

Overall, nonresidential construction contract values (including warehouse construction) fell 11.6 percent last year from 2017 totals in Texas while declining 2.3 percent nationally.

CHART 2

DFW Industrial Space Completions Outpace Office



SOURCE: CBRE Econometric Advisors.

Widespread DFW Growth

DFW gained nearly 25 million square feet of industrial space in 2018, following an increase of 29 million square feet in 2017—the greatest addition of space in at least the past 30 years, the period for which consulting firm CBRE Econometric Advisors maintains data (*Chart 2*). Warehouse growth has been particularly impressive. Since 2010, a total of 117.7 million square feet have come on the market in DFW. The total is equivalent to almost 43 Empire State Buildings, the iconic 102-story New York City skyscraper, and is five-and-a-half times the square footage of office property added in DFW during the period.

The warehouse market boom has reached into southern and western portions of Dallas that investors previously largely overlooked. It has been aided by an expansive transportation and logistics sector, a byproduct of e-commerce regional expansion that has contributed to the recent addition of freight, cargo-handling and fulfillment operations for Amazon, FedEx and UPS. In 2018, DFW had 10 of the country's largest warehouse deals.⁵

Additionally, burgeoning air freight operations at Fort Worth Alliance Airport and Dallas-Fort Worth In-

ternational Airport complement an extensive ground transport network. Construction of a regional air hub for Amazon Air—the first of its kind for the company and its logistics subsidiary—is underway at Alliance Airport and scheduled to become operational this year.⁶ Meanwhile, total cargo (freight and mail) flowing through DFW Airport rose for the fifth straight year in 2018, up 2.7 percent.⁷

This is no surprise given DFW's position as a major U.S. trade and distribution center, thanks to its central location and infrastructure. Employment in the transportation and logistics sector makes up 4.3 percent of the metro area's total employment—a higher share than other major metros.⁸ Moreover, healthy growth in the metroplex's employment and population base has fueled demand for consumer goods. DFW has added 1.1 million residents since 2010, ranking No. 1 among U.S. metros in numeric increase; Houston placed second.

Foreign investors have taken particular notice of the growth in DFW, ranking the metro No. 2 nationally behind Los Angeles in terms of foreign industrial acquisition activity in 2018, CBRE found.⁹ Buyers spent \$14.4 billion in the U.S., \$849 million of that

in DFW, with investors from Canada, China and Singapore accounting for most of the purchases from outside the country. Foreign investment made up 21 percent of total U.S. investment in this sector last year.

Trade, Logistics in Houston

E-commerce-related distribution, last-mile fulfillment facilities and demand from big-box retailers have similarly expanded throughout Houston. There were 63 warehouses under construction in Houston in late 2018, according to data from Avison Young, a commercial real estate firm.¹⁰ Houston is also a gateway for commercial and industrial goods passing through the Port of Houston—ranking No. 6 in the nation in container shipping in 2018, adding a significant global trade aspect to area activity.¹¹

The energy sector, rebounding from the 2015–16 slump, has played an increasing role, spurring growth of warehouse facilities to ship and handle energy-related cargo as well as for the manufacture of energy equipment and goods, including chemicals.

Houston recorded its second-largest five-year spurt of new industrial construction in the period ended last year—nearly 57 million square feet completed, of which 48 million square feet was warehouse space.¹²

Overall, industrial construction and demand paused during the 2015–16 energy bust (*Chart 3*). After adding under 1 million square feet of manufacturing facilities in 2014–15, the area regrouped from the slowdown, gaining 4.7 million square feet in 2016. After another slow year with little new inventory in 2017—coinciding with Hurricane Harvey devastation, though industrial properties were largely unaffected—a total of 1.1 million square feet of manufacturing space entered the market in 2018.

Moreover, petrochemical plant growth in Texas has been vibrant during the expansion and helped support southeast Texas activity. One recently completed large project is ExxonMobil’s ethane cracker in Baytown.¹³

Statewide Trade Expansion

San Antonio recorded heightened activity in the five years ended in 2018. Industrial space grew by 10.8 million square feet—about 87 percent for warehouses and the rest for manufacturing and research and development facilities.

A total of 1.4 million square feet of industrial space entered El Paso’s market during the five years ended in 2018, the highest five-year increase since 2008. The gain coincided with resurgent maquiladora manufactur-

ing and a resulting 47 percent increase in the number of full truck containers crossing into the U.S. from Mexico at the El Paso and nearby Santa Teresa, New Mexico, ports of entry during the period, according to U.S. Transportation Department data.¹⁴

El Paso’s latest (2014–18) industrial completions are significantly below the high recorded in the five-year period ended in 2000, when U.S.–Mexico transborder shipping was expanding rapidly in the wake of the 1994 implementation of the North American Free Trade Agreement.

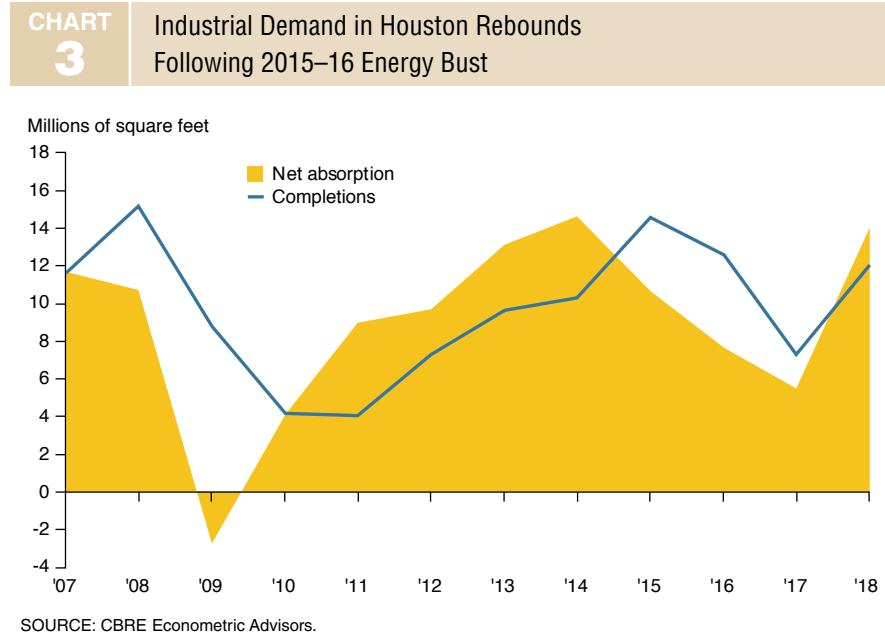
Transportation, Warehousing Jobs

Employment in the transportation and warehousing sector has mirrored the large space increases, particularly in DFW. Employment in Texas expanded 2.1 percent annually in the five years ended in 2018, while payrolls in transportation and warehousing rose more rapidly, 4.3 percent, led by growth in warehousing and storage employment.

The Dallas, Plano and Irving metropolitan division added 39,025 jobs in the transportation, warehousing and utilities sector (a 7.9 percent annual increase) in 2014–18, while in Fort Worth–Arlington, sector payrolls grew by 20,482 jobs (5.5 percent) (*Chart 4*). The five-year gains in DFW eclipse increases in any preceding five-year period at least as far back as the mid-1990s. Sector payrolls grew rapidly in Austin—an 8.2 percent annualized rate—during the five-year period. Houston’s transportation, warehousing and utilities employment expanded by 17,922 jobs in 2014–18, a 2.6 percent annualized increase.

Industrial Vacancies Tight

Demand for industrial space has taken off with growth in third-party logistics and in e-commerce, as firms seek warehouse space close to their customers. Nationwide, e-commerce and logistics companies accounted for 61 of the 100 largest warehouse deals (leases and sales) by square footage in 2018, and DFW had the third-largest volume of transactions by square footage, according to CBRE Research.¹⁵



Third-party logistics firms (transportation/distribution) made up nearly a third of industrial leasing by square footage from first quarter 2013 to first quarter 2019 in the Texas and Oklahoma region, which CBRE Research combines into a single unit. Accounting for much of the remainder of leasing were wholesale, 13 percent; materials manufacturing, 11 percent; food and beverage, 10 percent; and e-commerce, 9 percent.

Strong leasing demand has pushed overall industrial availability rates into the single digits in Austin, DFW, Houston and San Antonio since early 2016.¹⁶

Continued Growth in 2019

The outlook for Texas' industrial markets is mostly positive for the year. The state's broad economic expansion persists, and job growth is forecast at over 2 percent.¹⁷

Overall, investors expect to be more conservative in their commercial real estate acquisitions this year as high asset prices, financial market volatility, and global and trade uncertainty damp expectations, according to CBRE's 2019 Americas Investor Intentions Survey.¹⁸ Still, industrial and logistics remains the most favored property sector for investment.

Industrial construction in the five major metros is elevated, exceeding 47 million square feet as of first quarter 2019.¹⁹ Given that vacancy rates are close to multiyear lows in most major metros and Texas exports remain close to all-time highs, the industrial market appears to be on a solid footing. Uncertainty surrounding U.S. trade policy is a wild card, but its impact on the industrial sector thus far appears to be limited at least in the near term.

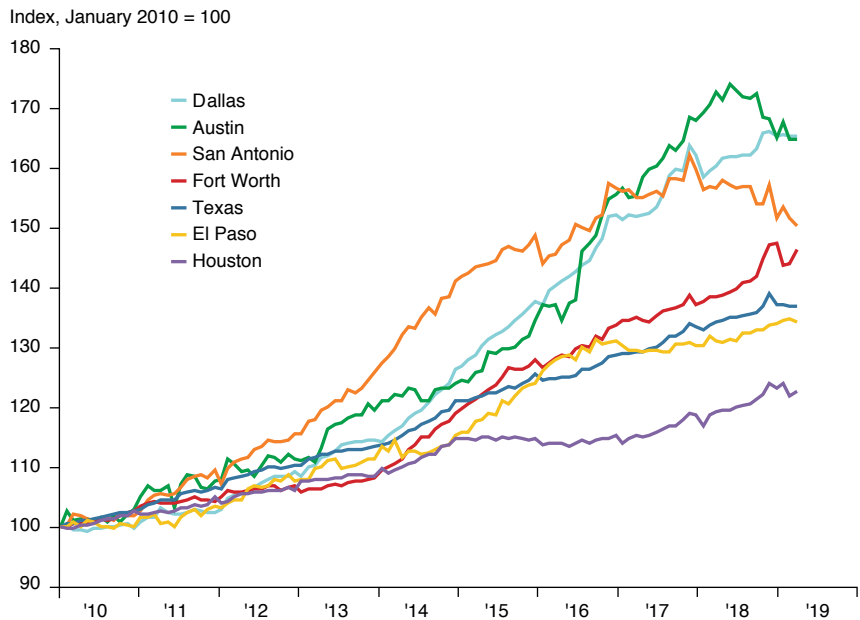
Assanie is a senior business economist, and Weiss is a senior writer/editor in the Research Department of the Federal Reserve Bank of Dallas.

Notes

¹ Data for Texas include Austin, Dallas, El Paso, Fort Worth, Houston and San Antonio. Data are as of first quarter 2019 from CBRE Econometric Advisors, which differs from the CBRE Research data series.

CHART 4

Transportation, Warehousing and Utilities Employment Expands at Rapid Clip in North and Central Texas



NOTE: Data are through March 2019.

SOURCES: Bureau of Labor Statistics; Texas Workforce Commission; seasonal and other adjustments by the Federal Reserve Bank of Dallas.

² Net absorption is the net change in occupied space in square feet during a given time period. It is measured by the square feet of completions less the change in available square footage.

³ Data are from Dodge Analytics.

⁴ State totals are calculated by adding the square footage of annual completions in 63 of the largest U.S. industrial markets at the metropolitan statistical area level.

⁵ "Dealmakers: E-Commerce & Logistics Firms Dominate Largest Warehouse Deals in 2018," U.S. MarketFlash, CBRE Research, Feb. 20, 2019, www.cbre.us/research-and-reports/dealmakers-e-commerce-logistics-firms-dominate-largest-warehouse-deals-in-2018.

⁶ "Amazon Taps Fort Worth's Alliance Airport for Regional Hub, Hundreds of Jobs," by Bill Hethcock, *Dallas Business Journal*, Dec. 11, 2018, www.bizjournals.com/dallas/news/2018/12/11/amazon-taps-fort-worths-alliance-airport-for.html.

⁷ Data are from DFW International Airport's website, www.dfwairport.com/stats/.

⁸ "At the Heart of Texas: Cities' Industry Clusters Drive Growth," Special Report, Federal Reserve Bank of Dallas, December 2018.

⁹ "Foreign Investors Pump \$14.4 Billion into U.S. Industrial Real Estate," U.S. MarketFlash, CBRE Research, April 17, 2019, www.cbre.us/research-and-reports/foreign-investors-pump-14-point-4-billion-into-industrial-real-estate.

industrial-real-estate.

¹⁰ "63 Warehouses Under Construction in Houston; More on the Way as Industrial Market Heats Up," RealtyNewsReport.com, Oct. 29, 2018, <http://realtynewsreport.com/2018/10/29/63-warehouses-under-construction-in-houston-more-on-the-way-as-industrial-market-heats-up/>.

¹¹ Data are from Port of Houston, www.porthouston.com/about-us/statistics/.

¹² Data from CBRE Econometric Advisors go back to the late 1980s.

¹³ "ExxonMobil Starts Up New Ethane Cracker in Baytown, Texas," ExxonMobil news release, July 26, 2018, <https://news.exxonmobil.com/press-release/exxonmobil-starts-new-ethane-cracker-baytown-texas>.

¹⁴ Data are from the U.S. Department of Transportation, Bureau of Transportation Statistics, <https://data.transportation.gov/Research-and-Statistics/Border-Crossing-Entry-Data/keg4-3bc2>.

¹⁵ See note 5.

¹⁶ Industrial availability rate data are from CBRE Econometric Advisors.

¹⁷ Dallas Fed Texas Employment Forecast, see www.dallasfed.org/research/forecast.

¹⁸ "Americas Investor Intentions Survey 2019," CBRE, www.cbre.us/research-and-reports/Americas-Investor-Intentions-Survey-2019.

¹⁹ Data are from CBRE Research as of first quarter 2019.

Eleventh District Banks Have Performed Well Despite Rising Funding Costs, Nonbank Competition

By Kelsey Reichow and Amy Chapel

ABSTRACT: Profitability picked up for Eleventh District banks in 2018 despite rising funding costs and slowing loan growth. Overall asset quality strengthened, though room for further improvement may be limited. Changes in capital regulation could affect bank risk taking.

Bank performance in the Eleventh Federal Reserve District was strong in 2018, outpacing the rest of the country.¹ Profitability increased, returning to prefinancial-crisis levels of more than a decade ago, and asset quality strengthened modestly with improvement in most loan categories.

Given that comparatively smaller community banks have a larger presence in the district than in the rest of the U.S., their relatively better performance is a reflection of strong regional economic growth, according to recently compiled data for 2018.²

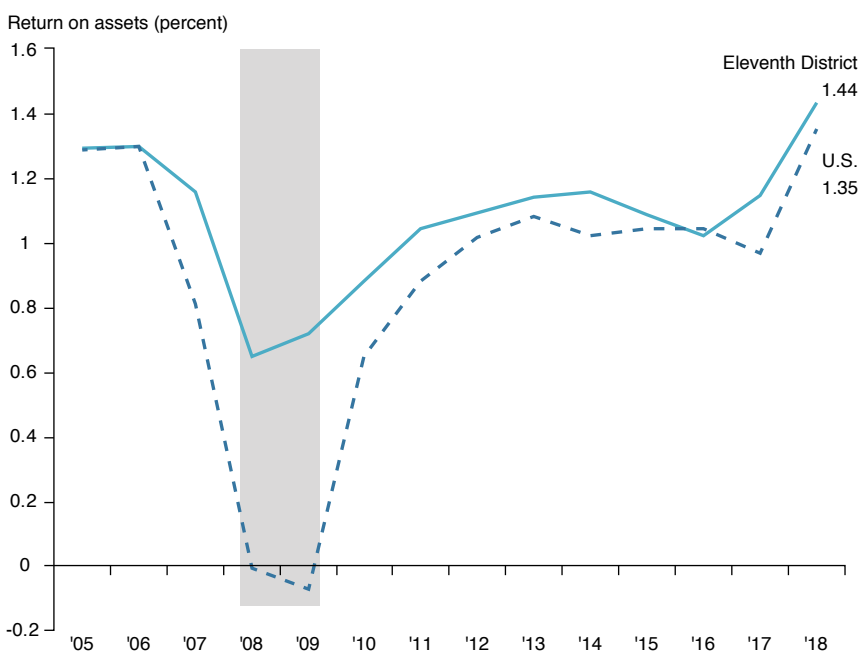
Despite the strong performance, banks face a challenging landscape in 2019, with rising funding costs and

continued competition from nonbank lenders. Cybersecurity remains a top bank risk, largely due to the dynamic and highly sophisticated nature of cyber risks and evolving external threats. Still, the majority of cyber breaches are caused by preventable factors including poor internal controls, a failure to keep systems properly updated or patched and a failure to follow internal policies.

Asset concentration levels rose at some banks. Concentration detracts from one of the most important strengths in the banking industry—diversification. While capital levels meet or exceed regulatory requirements, share buybacks and dividend pay-

CHART
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Bank Profitability Up in District and Nation



NOTE: Shaded area indicates U.S. recession.

SOURCE: Reports of Condition and Income, Federal Financial Institutions Examination Council.

ments are increasing, which could strain some banks' lending during the next downturn.

Profitability Picks Up

Bank profitability improved in 2018—propelled by higher net interest income and lower tax expense. Eleventh District banks earned an annualized return on assets of 1.44 percent in 2018, up from 1.15 percent in 2017 (*Chart 1*). Nationwide, bank profitability picked up 38 basis points to 1.35 percent in 2018 from 0.97 percent in 2017.

Maintaining current levels of profitability in upcoming quarters may become more challenging in light of increasing funding pressures and limited potential for asset quality to improve further. Higher short-term interest rates have prompted depositors to seek greater returns on their deposit balances.

Community banks, which traditionally faced competition only in their local markets, now encounter it from larger banks, online-only banks, money market funds and nonbank institutions that are all expanding their geographic reach online. Faced with the possibility of losing market share to digital competitors, banks with a traditional brick-and-mortar branch presence have increased rates on deposit accounts.

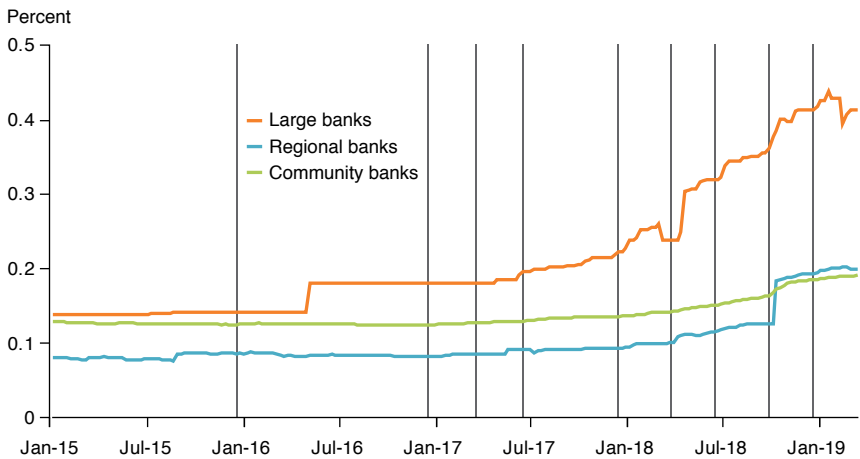
Since the monetary policy tightening cycle began in December 2015, rates paid on savings accounts by large banking organizations (assets exceeding \$100 billion) are up 27 basis points nationally. Rates on savings accounts among regional banking organizations (assets between \$10 billion and \$100 billion) rose 11 basis points, while rates at community banking organizations (assets less than \$10 billion) edged up seven basis points (*Chart 2*).

Some institutions, particularly community banks, have been able to minimize deposit rate increases, largely due to strong customer relationships and multiple product offerings.

The extent of funding pressure and competition for deposits is not fully captured in deposit rate increases.

CHART 2

Savings Account Deposit Rates Trend Higher for Banks of All Sizes



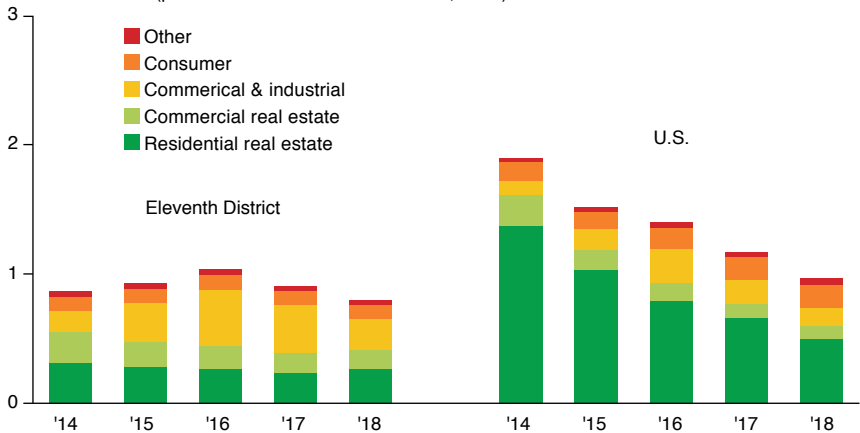
NOTES: Gray lines indicate federal funds rate hikes. Banks are distinguished by asset size. Community banks have total assets less than \$10 billion; regional banks have total assets of \$10 to \$100 billion; large banks have total assets exceeding \$100 billion.

SOURCE: S&P Global Market Intelligence.

CHART 3

Asset Quality Improves in the District and Nationally

Noncurrent loans (percent of total loans as of Dec. 31, 2018)



SOURCE: Reports of Condition and Income, Federal Financial Institutions Examination Council.

Some banks are offering consumers one-time cash incentives to open savings accounts and hold certain levels of deposits for a set period.

Asset Quality Strengthens

Bank asset quality improved again in 2018, although more so nationally than in the Eleventh District. Among Eleventh District banks, 0.79 percent

of total loans were noncurrent (past due 90 days or more or on nonaccrual status), down from 0.92 percent at year-end 2017 and below the national rate of 0.96 percent (*Chart 3*).

Nationwide, the noncurrent loan rate declined 21 basis points (an eight-basis-point greater improvement than the district), from 1.17 percent to 0.96 percent in 2018, with noncurrent loan

rates falling for most loan categories but ticking up one basis point for consumer loans.

The credit quality of Eleventh District banks' non-business portfolios generally is higher than that of their national peers—largely due to fewer problem mortgages and comparatively limited credit card lending—while the credit quality of their commercial portfolios is lower.

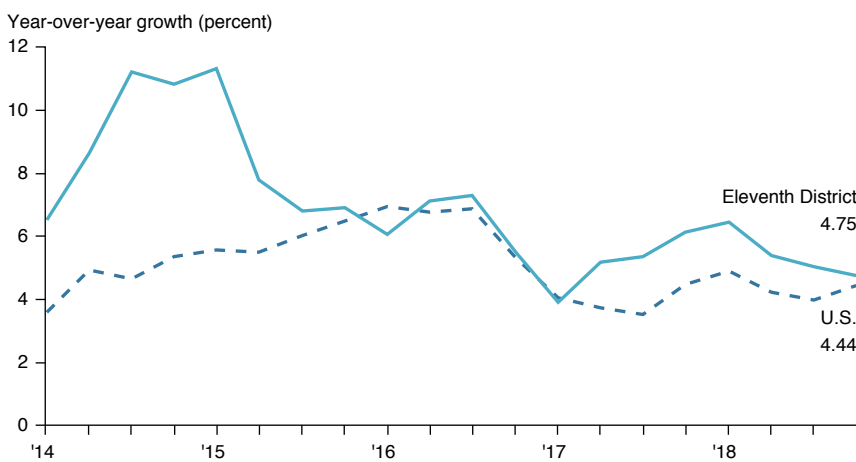
During the energy downturn in 2015–16 and its aftermath, commercial and industrial (C&I) loans were the largest component of noncurrent loans in the Eleventh District. The trend reversed in 2018—reflecting the pass-through impact of improved energy prices in 2017—with the value of noncurrent C&I loans declining. The reduction in the noncurrent C&I portfolio in 2018 was not widespread—80

percent of the decline in the fourth quarter can be attributed to three banks, perhaps suggesting that there is limited room for further improvement in asset quality.

Noncurrent residential real estate loans (0.27 percent of total loans) were the largest portion of noncurrent loans in the Eleventh District in 2018, followed by C&I (0.23 percent) and commercial real estate (CRE) (0.15 percent). Residential real estate remains the largest portion of noncurrent loans nationally at 0.50 percent of the total portfolio, down from 0.66 percent, followed by consumer lending (0.18 percent) and C&I (0.14 percent).

CHART 4

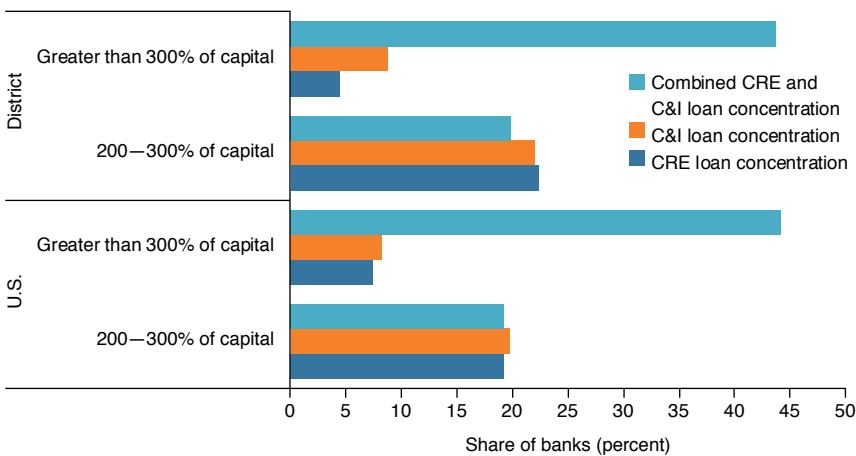
District Loan Growth Slows, Converges Toward Nation



SOURCE: Reports of Condition and Income, Federal Financial Institutions Examination Council.

CHART 5

Majority of District, U.S. Banks Have Combined CRE and C&I Loan Concentrations Exceeding 200 Percent of Capital



NOTE: Commercial real estate (CRE) loans include commercial land development loans, multifamily loans and nonowner-occupied nonfarm nonresidential real estate loans. Commercial and industrial (C&I) loans are defined as C&I loans plus owner-occupied nonfarm nonresidential real estate loans, plus other leases. Loan concentrations are calculated as a share of total risk-based capital; data are as of 2018.

SOURCE: Reports of Condition and Income, Federal Financial Institutions Examination Council.

District Loan Growth Slows

Loan growth was little changed at U.S. banks at 4.44 percent year over year in fourth quarter 2018. Eleventh District bank loan growth, while still outpacing national loan growth, slowed to 4.75 percent year over year, converging toward the national growth rate (*Chart 4*). The district's decrease in year-over-year CRE loan growth from year-end 2017 (8.44 percent) to year-end 2018 (6.77 percent) contributed to the slowdown.

Meanwhile, C&I loan growth remained strong, 7.76 percent year over year in the nation and 6.57 percent in the district.

A more competitive lending environment has contributed to slower loan growth for banks even as the economy continues expanding. Competition from nonbanks, which are increasing their lending footprint, is growing. For example, nonbank retail and broker mortgage originations nationally accounted for 54.8 percent of the value of all mortgage originations in 2018, up from 43.8 percent in 2013.³

Credit Concentration Concerns

Over the past three years, CRE and C&I concentrations at some banks have remained high or increased. Relative to some other assets, CRE and C&I assets can be more volatile and have greater potential to lose value during an economic downturn. Bank loan diversification is important, given

a significant correlation between loan portfolio concentrations—particularly CRE—and bank failures.⁴

Nationally, as well as in the district, 27 percent of banks have a CRE concentration above 200 percent of risk-based capital, the financial cushion available to absorb losses for a given level of risk (*Chart 5*).⁵ However, a larger share of banks nationally have a concentration exceeding 300 percent of risk-based capital—7 percent compared with 4 percent in the district.

C&I concentrations are more significant. Twenty-eight percent of banks nationally have a C&I concentration above 200 percent of risk-based capital compared with 31 percent in the district. A total of 9 percent of district banks and 8 percent of national banks have concentrations exceeding 300 percent.

Sixty-four percent of U.S. and district banks have a concentration above 200 percent of risk-based capital in these two commercial lending sectors combined. Among national and district banks, 44 percent have combined commercial credit concentrations exceeding 300 percent of risk-based capital.

Rising capital levels may mitigate credit concerns. Risk-based capital as a share of risk-weighted assets is a good measure of an institution's capital adequacy.⁶ This share for the district was relatively unchanged, rising two basis points in 2018 from 2017. Nationally, risk-based capital as a share of risk-weighted assets rose nine basis points in 2018.

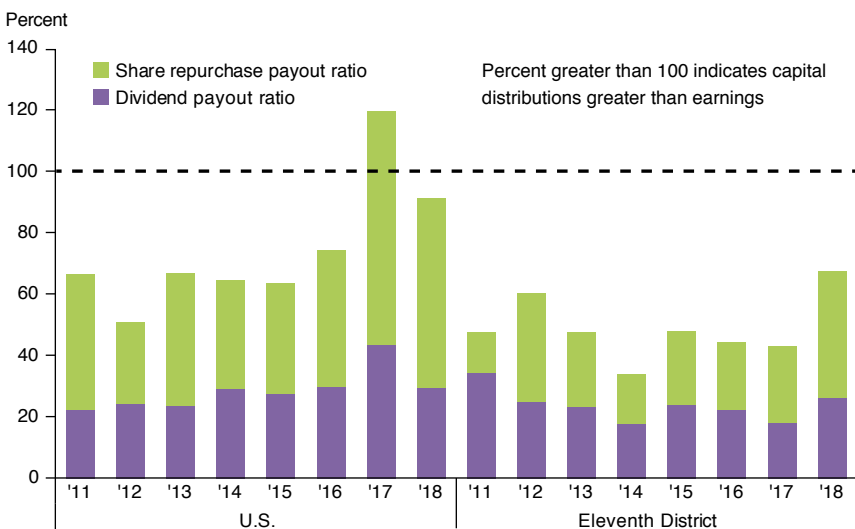
Capital Distributions Grow

Dividend payments and share repurchases also impact capital levels. When banks make dividend payments and repurchase shares (for those that are publicly traded), capital that otherwise could have been used for loans to businesses and consumers is returned to shareholders.

Growing capital distributions faster than earnings—which banks nationally did in 2017—could strain an institution's ability to lend in the next downturn. Additionally, banks' return of capital may indicate they believe

CHART 6

District Payouts Rise as Banks Retain Fewer Earnings, Return More Capital to Shareholders



NOTE: Share repurchase and dividend ratios calculated as a percentage of net income.
SOURCE: Reports of Condition and Income, Federal Financial Institutions Examination Council.

there are comparatively few attractive lending prospects in the economy.

Nationally, banks' dividend and share buybacks moderated in 2018 (to 91.4 percent of net income, down from 119.6 percent in 2017), with banks paying out slightly less than their earnings. District banks paid out more earnings in 2018 than in 2017—payouts totaled 67.4 percent of net income in 2018, up from 43 percent in 2017 (*Chart 6*).

Capital Regulations Ease

The purpose of bank capital is to buffer unexpected loss. Inadequate capitalization of banks can reduce overall credit availability and negatively affect the economy. Recent legislation directs a reduction in capital requirements for U.S. banks.

Specifically, the 2018 Economic Growth, Regulatory Relief and Consumer Protection Act provides relief for some large banks on leverage standards and for community banks on risk-based capital standards. These changes have the notable feature of reducing for each type of bank its most binding regulatory capital constraint.

Risk-based capital ratios assign different weights to assets to account

for the difference in their level of risk. Riskier assets receive a higher weight, which requires banks to hold more capital to meet the regulatory requirement. Leverage ratios treat all assets as having the same risk, requiring banks to hold the same amount of capital for any asset.

A new community bank leverage ratio, a regulatory capital relief provision for community banks, affects a number of banks in the district.⁷ A bank with total assets under \$10 billion may opt to report only the community bank leverage ratio—proposed as a capital-to-asset ratio of 9 percent—rather than the four regulatory measures of capital adequacy they currently report.

Backers of the community bank leverage ratio standard say the risk-weighted system is unnecessarily complex for smaller institutions. Community bank leaders have spoken about the difficulties of dealing with regulations designed for larger institutions that were more central to the financial crisis.⁸

Nonetheless, the new leverage ratio alone may be insufficient to account for a bank's riskiness, and without risk

weighting, banks may have an incentive to take on more risk.

The Congressional Budget Office estimates that 70 percent of community banks will opt in to the new leverage regime, assuming adoption of the 9 percent threshold.⁹ A majority of community banks already exceed a 9 percent leverage ratio, and within the district, 88 percent of community banks have a leverage ratio higher than 9 percent.

Industry Consolidation Continues

Nationwide, the total number of banks has declined 35 percent over the past decade, from 8,279 institutions in 2008 to 5,393 in 2018. Given that technological advances can extend a bank's geographic reach, the downward trend is not necessarily a source of concern in terms of the provision of financial services as long as sufficient competition remains.

Lower taxes, higher interest rates and regulatory changes encouraged increased merger activity. Lower taxes can generate additional liquidity that may be used to acquire other companies. Higher interest rates increase competition for most banks and make mergers more attractive for those requiring access to stable deposits or needing other efficiencies.

Furthermore, the recently enacted increase in regulatory thresholds may encourage merger activity as some banks have more room to grow before surpassing the new limits.

Most of the decline in the number of institutions can be attributed to a lack of new bank formation and voluntary mergers rather than bank failures.

Mergers increased from 196 in 2017 to 226 in 2018.¹⁰ Smaller banks seeking to take advantage of economies of scale drove the majority of the mergers. At the same time, the number of newly chartered banks across the nation increased from only five in 2017 to seven in 2018. There were no bank failures in 2018, compared with an average of eight during each of the past five years.

Data suggest banks are becoming more efficient—better leveraging technology for products, distribution and analytics and enjoying economies of scale that come with consolidation. A measure used to quantify how much it costs an institution to generate revenue—the efficiency ratio—has declined since 2014 for all U.S. banks and since 2016 for district banks, indicating increased efficiency.¹¹ The ratio declined from 65 percent in 2008 to 57 percent in 2018 for U.S. banks and from 66 percent to 62 percent for district banks.

In spite of the efficiency gains from mergers, the falling number of smaller banks can have an unintended consequence. Community banks are key providers of credit in rural communities and for small businesses, which are important contributors to the economy.

Texas' 2019 Economic Gains

Eleventh District banks' performance continued to improve in 2018, but increased funding pressures and competition in 2019 will likely pressure profitability. Asset quality is high and improved again in 2018, but further gains may be limited.

Community banks should benefit from regulatory relief this year. However, due to the new regulations, institutions' regulatory capital may not fully capture the riskiness of loan portfolios at a time when the number of institutions with concentrations in riskier assets is high.

By various measures, banks are becoming fewer but more efficient as a result of consolidation, though concerns remain about credit and banking service availability for small businesses and rural areas.

Banking industry performance remains highly dependent on economic conditions. The Dallas Fed forecasts Texas job growth at slightly over 2 percent in 2019, about the same as in 2018 and close to trend.¹² District banks face challenges this year but should continue to reflect healthy regional economic fundamentals.

Reichow was a financial industry analyst at the Federal Reserve Bank of Dallas, and Chapel is a macro-surveillance manager in the Banking Supervision Department.

Notes

¹ The Eleventh District includes all of Texas, northern Louisiana and southern New Mexico.

² Community banks have total assets of less than \$10 billion.

³ Inside Mortgage Finance Publications Inc., 2019, www.insidemortgagefinance.com.

⁴ See "Estimating Today's Commercial Real Estate Risk," by Pablo D'Erasmus, Federal Reserve Bank of Philadelphia *Banking Trends*, First Quarter, 2019, www.philadelphiafed.org/-/media/research-and-data/publications/banking-trends/2019/bt-estimating-todays-commercial-real-estate-risk.pdf.

⁵ Specifically, risk-based capital is a method of measuring the minimum amount of capital (assets less liabilities) based on riskiness of the lending portfolio required by regulation to support an institution's operations given its size.

⁶ Risk-weighted assets are calculated by assigning a weight to an institution's assets based on the asset's riskiness.

⁷ Other small-bank regulatory relief provided for by the Economic Growth, Regulatory Relief and Consumer Protection Act includes a Volcker Rule exemption, a shorter required regulatory report, an extended exam cycle and other mortgage-related exemptions.

⁸ See "Small Banks Squeezed," by Jeffery W. Gunther and Kelly Klemme, Federal Reserve Bank of Dallas *2012 Annual Report*.

⁹ Congressional Budget Office cost estimate, March 5, 2018, www.cbo.gov/system/files/115th-congress-2017-2018/costestimate/s2155.pdf.

¹⁰ 2018 merger data for the district were unavailable as of May 2019.

¹¹ The efficiency ratio is calculated by dividing a bank's noninterest expense by its net income.

¹² See the Dallas Fed's Texas Employment Forecast at www.dallasfed.org/research/forecast.

A Conversation with Charlie Amato

Texas Economy Remains Strong Despite Challenges

Charlie Amato is chairman and co-founder of Southwest Business Corp. (SWBC), a company with 17 lines of business including insurance brokerage, financial planning, employee benefits administration and mortgage servicing. Amato, who has more than 40 years of experience in all aspects of insurance operations, offers insights into issues the Texas economy faces.

Q. While SWBC has worldwide operations, much of its business is in Texas. Given that, how do you see conditions in the state this year?

SWBC is headquartered in San Antonio, and yes, we have offices across the country. The benefit to being in Texas is that it's a pro-business environment, and our elected officials encourage economic growth.

The economy is the strongest I have ever seen. Generally speaking, the U.S. is doing well, and Texas is doing even better. Within our company, all of the divisions are making money—and that is pretty rare. I am optimistic, as uncertainty has decreased since the fourth quarter of last year and business activity is robust.

Q. Texas housing prices have appreciated sharply over the past five years. How do you see this affecting housing markets?

There is no question that home price appreciation has negatively impacted affordability. However, there are still a number of good financing options for most people.

Fannie Mae's Home Ready mortgage program and Freddie Mac's Home Possible mortgage program provide 97 percent financing and waive certain risk-based pricing adjustments for borrowers

at or below the HUD median income for the area. The Federal Housing Administration [FHA] and VA [Veterans Administration] also have good programs for low- to moderate-income earners.

One of our biggest concerns is related to the potential consequences of government-sponsored enterprise reform (covering Fannie Mae and Freddie Mac). The Dodd-Frank Act established standards that a lender must meet to document that a borrower has the ability to repay a loan.

A lender has a safe harbor for liability with respect to loans that meet the requirements deemed to constitute a qualified mortgage [QM]. These QM standards include a debt-to-income ratio cap of 43 percent or, in the alternative, eligibility for Fannie Mae and Freddie Mac, FHA or other government programs.

The availability of these government-sponsored loan programs for higher-indebted borrowers is commonly referred to as the "QM patch." Regrettably, the QM patch is set to expire in 2021. Allowing the QM patch to expire would have a negative impact on housing affordability that would disproportionately affect low- to moderate-income borrowers.

There is a market among private investors for loans that do not meet the QM standards. However, the interest rates for those loans are significantly higher due to the increased risk associated with the lack of a safe harbor.

Q. SWBC is a large insurance brokerage. How did Hurricane Harvey affect mortgage delinquency and what would be the impact of continued severe weather events?

Our total mortgage delinquency percentage for the Houston area more than quadrupled from July 2017 to its peak in October 2017. Delinquencies returned to normal levels beginning in November 2018.

Quite a bit of the flooding occurred in areas outside of designated "special flood hazard areas," meaning many affected homeowners were not required to carry flood insurance and few did so. Since much of the flood coverage that was in place was purchased through the National Flood Insurance Program [NFIP], there was no immediate increase in flood insurance cost. There are reports that NFIP plans to adopt a new rating structure, Risk Rating 2.0, where new rates are expected to take place in 2020. The expected result is likely to increase NFIP insurance costs in higher-risk areas, which could create a drag on the housing market in those areas.

Q. In general, what percentage of flood insurance is from private insurance companies and how will this change in the future?

Private companies represent about 15 percent of policy premiums, although much of the private insurance is covering losses exceeding the \$250,000 cap set by the NFIP. Private companies historically have had difficulty participating in the market. One major issue has been the inability to properly underwrite policies, with lending regulations that did not explicitly allow private flood insurance policies.

Many lenders were hesitant to accept private flood policies as a result. This will change due to a final rule issued by federal lending regulators that takes effect July 1. The likelihood that a private insurer would be wiped out by a major flood in a region is small since many insurers reduce regional risk by reinsurance with companies in different areas



► *We're paying closer attention to younger talent—looking for individuals capable of being groomed into leadership roles.*

of the world through intermediaries such as Lloyd's of London.

A major impediment to the privatization of the flood insurance market is tied directly to the guidance and messaging delivered by the federal government and its FEMA [Federal Emergency Management Agency] representatives. Even today, it is difficult to determine if the government will consider private companies as competitors or partners within the next five to 10 years.

Recent announcements regarding FEMA's plans to revamp the NFIP by creating a new rating model [Risk Rating 2.0] has caused many private companies to rethink their flood insurance strategies. In the past, NFIP rates were the same across any given flood zone. Private insurers, however, use the latest mapping tools and improved data to create accurate and precise risk modeling within flood zones so that they can price differently based on the risk of flooding.

If FEMA uses a similar pricing method with its new rating model, then private insurers may be priced out of the market in the lower-risk areas of flood zones where they have successfully acquired customers in the past.

The fact remains, however, that despite these challenges, the flood insurance market will become a more competitive space as private companies gain market share and expand their underwriting guidelines to include riskier properties. We are confident that progress will be made and private flood insurance options will become more relevant and necessary in the future.

Q. You are involved in the multifamily housing market in Texas. How is this sector doing?

The multifamily housing market is still doing well in Texas. The increase in the

number of jobs is causing more people to move here. Additionally, we're seeing a higher percentage of renters in the general population—some by choice, some by necessity.

Challenges include limited availability of suitable sites to construct new multifamily housing, cities' and communities' reluctance to allow new multifamily projects, and increases in construction costs, including labor and materials.

A significant opportunity is in the renovation market. Most older developments are located close to jobs, amenities and retail services the tenant market desires. Usually these types of projects need minimal remodeling to bring them up to new construction standards, and the cost to acquire the project is 20 to 30 percent lower than new construction.

Q. How is labor market tightness affecting SWBC? Has the company changed how it does business as a result?

The impact has been felt in recruiting and retention. On the recruiting side, the volume of available candidates has decreased. This has caused us to become much more adept at the use of social media to cast a wider net to let passive candidates know we are hiring, especially in the very competitive IT [information technology] space.

Generally, we have still been able to find quality applicants, but the process has become more elongated to attract top candidates. Most companies are doing everything possible to retain their high-performing employees. The number of counteroffers to candidates from their current employer has grown considerably over the past 12 to 18 months.

Regarding retention, in 2018 SWBC put in place a top-performer program in its largest division. This was a way to en-

sure at staff levels that the best-of-the-best were eligible for incentive compensation on top of an already strong base pay.

In our real estate business, our construction partners say that with the aging of true craftsmen and a shortage of younger qualified tradesmen, work production and quality have declined. This results in heavier burdens on superintendents and project managers to get the job done. We spend more time analyzing the workload and scheduling commitments of prospective contractors to ensure timely completion of our projects. In addition, we're paying closer attention to younger talent—looking for individuals capable of being groomed into leadership roles.

Q. Historically, the Texas economy has grown faster than the national average. Given your experience, why is this, and will this edge remain in the future?

Texas has one of the best economies in the nation. I believe its main strength is that it's one of the most diversified state economies. It also is a low-tax-and-regulation state.

An example is the tort reform [affecting civil lawsuits], which was passed in 2003. At the time, the very high cost of malpractice insurance was driving many doctors to leave Texas or to retire early. I was on the board of a hospital at the time, and it was a severe problem. The Legislature was able to pull together to resolve that issue. Texas is a business-friendly state with regulations that encourage business success, and I don't see that changing any time soon.

Mexico's Fiscal Reform Earns Mixed Reviews

By Jesus Cañas

Mexico historically has had one of the lowest tax-to-gross-domestic-product (GDP) rates in Latin America and by far the lowest among Organization for Economic Cooperation and Development (OECD) nations.

To compensate for the lack of tax collection to fund government, Mexico has depended heavily on its state-owned oil company, Pemex. Thus, when oil production began declining in 2004, fiscal reform gained urgency.

The Mexican government, seeking to put public sector finances on a sustainable path, adopted a major tax overhaul in 2013. It sought to broaden the tax base and increase tax rates.

The reform included higher tax rates on certain products and services—junk food, sugary drinks and private school tuition—and on certain groups, such as higher-income households. It also unified the value-added tax throughout the country, ending lower sales tax rates in border regions (a change recently reversed).

The revised rules also imposed a 10 percent capital gains tax on profits from shares traded on the Mexican stock exchange and offered incentives to bring the more than 5 million informal-sector businesses into the formal sector, where their operations could be overseen and taxed.¹

Independence from Oil

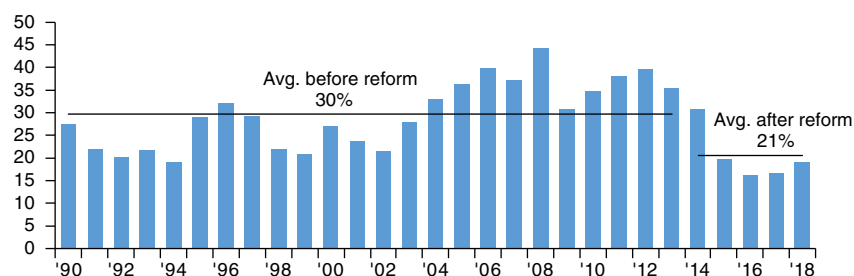
The fiscal reform succeeded in reducing Mexico's dependence on oil revenue (*Chart 1*). Its share of total government revenue declined from 35 percent in 2013 to 19 percent in 2018. The overhaul also succeeded in raising Mexico's non-oil tax-to-GDP ratio from 15 percent in 2013 to 18 percent in 2018, putting it on par with Colombia but still behind Chile and El Salvador.²

The major contributors to the increase in non-oil revenue collection have been the middle class and the corporate sector—accounting for

CHART
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Mexico Reduces Oil Dependence After Fiscal Reform

Oil revenue/total government revenue (percent)



SOURCES: Secretaría de Hacienda y Crédito Público (Mexico Secretariat of Finance and Public Credit).

1.3 percentage points of the increase. Higher taxes on gasoline and diesel brought in another 1.5 percentage points of the gain.

Tax Receipts Still Lag

Mexico's total government revenue as a share of GDP was 22 percent in 2018, close to the 23 percent average in Latin America and the Caribbean, but still the lowest among OECD members, who average 34 percent.³

As a result, Mexico spends a relatively small amount on public services. While low taxes are generally a positive for growth, the limited public outlays restrain expenditures for education, health and infrastructure. Mexico's education spending fell 2.2 percent annually between 2014 and 2018, while health expenditures declined 2.9 percent annually during the period. Government investment, including infrastructure, has fallen over the past 10 years.

While Mexico's recently elected government canceled a new \$13 billion Mexico City airport, it has announced plans for other infrastructure projects, among them a Maya train linking five states in southeast Mexico and ultimately connecting the Pacific Ocean and the Gulf of Mexico.

Additional plans include paving 300 roads in the southern state of Oaxaca,

providing nationwide internet coverage with free access in schools, hospitals and public spaces, building 100 public universities and construction of an \$8 billion refinery. Realization of these projects is uncertain given the new government has also declared a firm commitment to fiscal discipline.

Mexico's deficits have averaged 2.4 percent of GDP since the fiscal reform, and national debt has been stable at 47 percent of GDP. (By comparison, the U.S. debt-to-GDP ratio exceeds 105 percent.)

Near-term concerns include the still-precarious position of Pemex's impact on the overall economy. Oil production continues to fall, and the state-owned oil company has considerable debt and pension obligations. The major debt-rating agencies have downgraded Pemex debt, putting pressure on Mexico's sovereign debt outlook.

Notes

¹ "Mexico Tax Reform Bill Approved for 2014," *International Tax Review*, December 2013, www.internationaltaxreview.com/Article/3348483/Mexico-Tax-Reform-Bill-approved-for-2014.html?ArticleId=3348483.

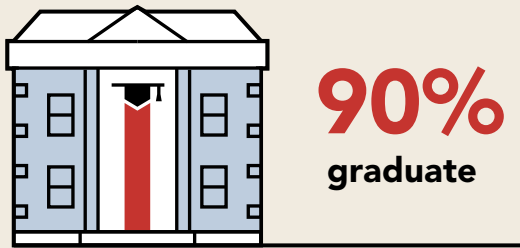
² Total tax-to-GDP ratio, including oil revenues, fell from 23 percent in 2013 to 22 percent in 2018 mainly due to falling oil production and lower oil prices.

³ "Economic Survey of Mexico," Organization for Economic Cooperation and Development, May 2019, www.oecd.org/economy/mexico-economic-snapshot/.

Texas Graduation Rates Commendable, but State Could Fall Behind

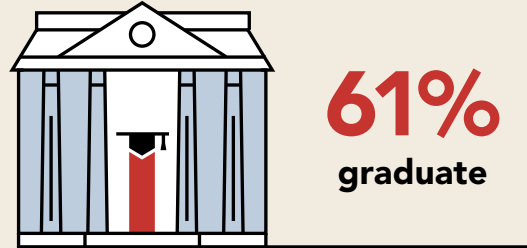
Design: Darcy Taj; Content: Grant Strickler

High School Rate Ranks No. 4 in U.S.



Texas high school graduation rates rank highly among the states and ahead of the U.S. overall.

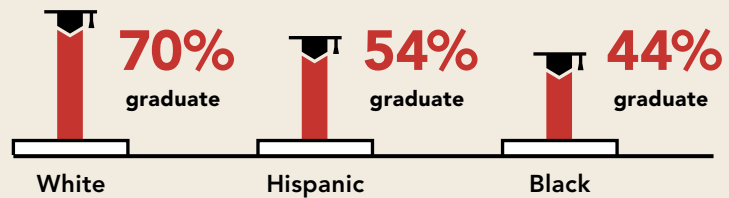
College Rate Is on Par with U.S.



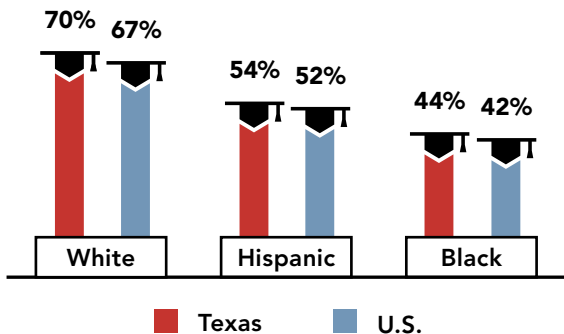
Texas equals the U.S. in graduation rates from four-year public colleges.

However, College Rates by Race and Ethnicity Reveal Gaps

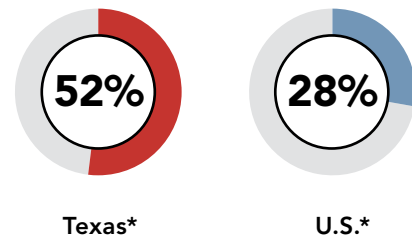
Texas college graduation rates are far higher for white students than Hispanic or black students.



While Texas College Graduation Rates Are Ahead of U.S. ...

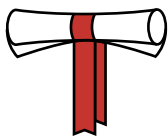


... the State's College Student Population Is More Diverse



*Share of students enrolled at public universities who are either Hispanic or black.

Texas Faces a Significant Graduation Rate Gap



Hispanic and black students together constitute a majority in Texas public universities—and the share is likely to grow. Yet Hispanic and black students graduate at much lower rates than non-Hispanic white students. Texas must close this graduation rate gap or risk falling behind the nation in terms of educational outcomes.

NOTES: The high school graduation rate is the four-year adjusted rate for the cohort graduating in 2017. College graduation rates are six-year rates at public four-year institutions for the cohort entering in 2011. Race groups are non-Hispanic. The share of college students is for 2017 enrollment.
 SOURCES: U.S. Department of Education, National Center for Education Statistics, and Digest of Education Statistics; Texas Education Agency and Texas Higher Education Coordinating Board; National Student Clearinghouse.

SNAPSHOT

Shale Breakevens Anchor Oil Prices

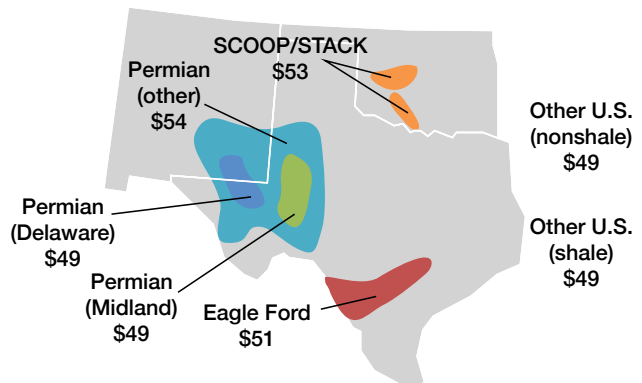
The oil price that companies need to profitably drill new wells has closely tracked prices for long-dated oil futures in recent years. The emergence of U.S. shale production seems to be playing a large role in anchoring long-term oil prices.

The breakeven price is of great interest because it provides information on how activity in the oil sector might adjust if oil prices move dramatically. Its relevance has only grown over the past decade with the emergence of shale oil in the United States. Shale has a shorter lead time between drilling and production relative to traditional oil projects, making it more responsive to oil price movements.

The average breakeven price of West Texas Intermediate crude oil has fallen 4 percent (or \$2 per barrel) over the past year, to \$50 per barrel, according to the latest Dallas Fed Energy Survey.

—Adapted from Dallas Fed Economics, May 21, 2019,
by Michael D. Plante and Kunal Patel

CHART 1 Average Breakeven Prices in U.S. Range from \$48 to \$54 per Barrel



NOTES: In the March 2019 Dallas Fed Energy Survey, executives from 82 exploration and production firms answered the question, "In the top two areas which your firm is active: What WTI oil price does your firm need to profitably drill a new well?" The survey collection period was March 13–21.

SOURCE: Federal Reserve Bank of Dallas.



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